

P-5.2 Compare the properties of electromagnetic and mechanical waves.

Revised Taxonomy Level 2.6 Compare conceptual knowledge

In physical science students

- ❖ “Summarize the characteristics of the electromagnetic spectrum (including the range of frequencies, wavelengths, energy, and propagation without a medium).” (PS-7.5)

It is essential for all students to

- ❖ Compare electromagnetic and mechanical waves in terms of each of the properties addressed in P-5.1

Assessment

As stated in the indicator, the major focus of assessment is to compare (detect correspondences) in the properties of mechanical and electromagnetic waves. Because the indicator is written as conceptual knowledge, assessments should require that students understand the “interrelationships among the basic elements within a larger structure that enable them to function together.” In this case, assessments must show that students understand the reasons for the difference in the two types of waves in terms of each of the listed properties and characteristics.

